Public Pensions

Public pensions are the financial lifeline of the elderly in many societies. While some European public pension schemes date back to the end of the 19th century, current systems are the result of changes instituted largely after World War II. The most obvious and, to governments, most worrisome consequence of projected population aging will be an increase in budgetary outlays in the form of old age pension payments, especially in those countries in which public pensions are predominately financed on a pay-as-you-go basis. Increases in migration also are prompting governmental concern about the "exporting" of cash benefits to retirees in other countries (Bolderson and Gains, 1994).

Most pay-as-you-go systems in industrialized countries initially promised generous benefits. These pension programs, at their inception, were based on a small number of pensioners relative to a large number of contributors (workers). As systems matured, ratios of pensioners to contributors grew and in some countries became unsustainable, particularly during periods of economic stagnation. One result of such changes was the development of private pension systems to complement public pension systems (Fox, 1994); such complementary arrangements are discussed in Chapter 5. Other measures taken or considered have included increasing worker contribution rates, restructuring or reducing benefits, and raising the standard age of retirement (ISSA, 1993).

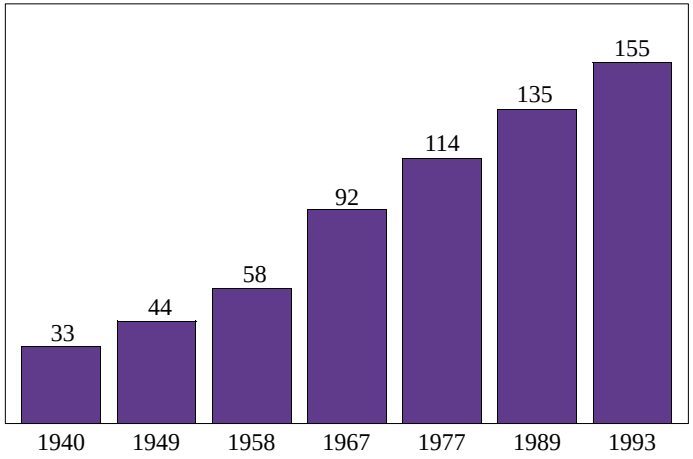
Public pension systems in the developing world generally cover a smaller proportion of the labor force than in industrialized societies. Even in economically vibrant societies such as Hong Kong and Thailand, there currently is no publicly-supported, comprehensive retirement pension scheme (Bartlett and Phillips, forthcoming; Domingo, 1995). Informal (usually family) systems provide the bulk of social support for older individuals in many countries, particularly in Africa and South Asia. As economies expand and nations urbanize, informal support systems such as extended family care and mutual aid societies have tended to weaken. A major challenge for governments in developing nations is to effect the expansion of formal-system coverage (especially in rural areas) while maintaining support for extant informal mechanisms.

The spread of public old-age security systems

Old-age pension schemes have become social institutions in many if not most countries throughout the world. The goal of most public old-age pension schemes is to provide all qualifying individuals with an income stream during their retirement years, income which is: 1) continuous; 2) adequate; 3) constant, in terms of purchasing power; and 4) capable of maintaining the socioeconomic position of the retired in relation to that of the active population (Nektarios, 1982).

Since the Second World War, public pension plans have played an increasingly important role in providing retirement income to older people in most societies. The major impetus for development of public pension systems, particularly in industrialized countries, was the inability of private intergenerational transfers to provide adequate retirement income for older citizens. The number of countries with an old age/disability/survivors program has increased from 33 in 1940 to 155 in 1993 (USSSA, 1994). The World Bank (1994) estimates that formal public programs provide coverage for approximately 30 percent of the world's older (aged 60 and over) population, with some 40 percent of the world's working-age population making contributions toward that support.

Figure 4.1
Number of Countries With Public Old-Age/ Disability/Survivors Program: 1940 to 1993



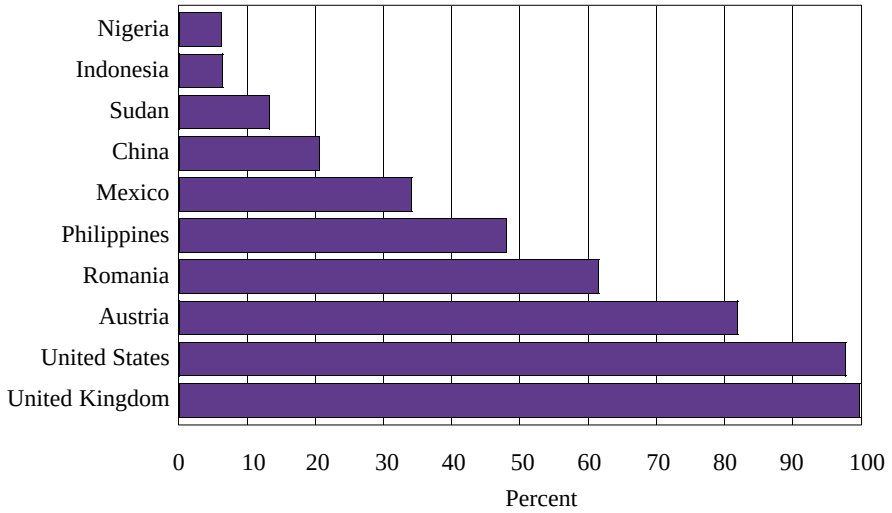
Source: USSSA, 1994

Labor force pension coverage varies from universal to nil

Mandatory old-age pension plans now cover more than 90 percent of the labor force in most developed countries. Governments are responsible for mandating, financing, managing and insuring public pensions. Public pension plans usually offer defined benefits which are not tied to individual contributions, but rather, are financed by payroll taxes. This arrangement is commonly referred to as a "pay-as-you-go" system insofar as current revenues (taxes on working adults) are used to finance the pension payments of persons who are retired from the labor force (Mortensen, 1992).

In developing countries, public pension systems typically cover a much smaller fraction of workers than in industrialized nations. In many cases, coverage is restricted to certain categories of workers such as civil servants, military personnel, and employees in the formal economic sector. Rural, predominantly agricultural workers have little or no pension coverage in much of the developing world.

Figure 4.2
Percent of Labor Force Covered by Public Old-Age Pension Program: 1991



Source: ILO, 1994

Pension financing has evolved in myriad ways

The structure of public pension financing has taken many forms throughout the industrialized world, often as the result of policy choices made after World War II. Countries use different means to achieve national pension objectives, with resulting differences in the mix between public and private (occupational) provision, in the roles of various tiers of pension coverage (basic protection, supplementary benefits, etc.), in institutional/administrative arrangements, and in sources of pension funding (ILO, 1989).

Most European countries finance their social insurance schemes primarily through employer and employee contributions. The latter tend to be proportionally greater in Western than in Northern and Southern Europe. Prior to their recent move toward market economies, many Central and Eastern European countries relied heavily on state funding of pensions from general revenues, although employers made major contributions in Hungary and especially Romania.

Figure 4.3
Public Pension System Funding in Europe, by Source: 1983

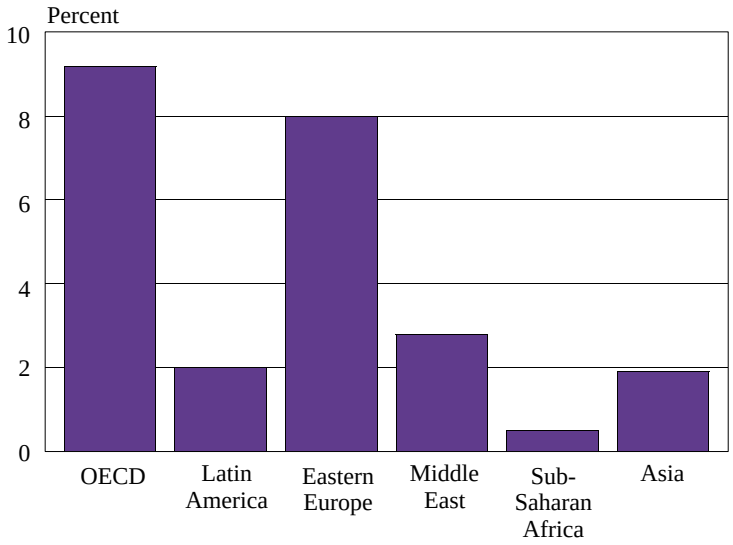
Source: ILO, 1989

Public pensions absorb nearly one-tenth of gross domestic product in developed countries

The cost of public pensions is greatest among industrial nations, most of which have pay-as-you-go systems. Pension expenditure has, on average, come to exceed 9 percent of gross domestic product (GDP) in OECD nations, and represented 8 percent of GDP in Eastern Europe around 1990. Since 1960, one-quarter of the increase in total public expenditure in OECD countries has been growth in pension expenditure. On average, the growth of pension expenditure has been twice as fast as that of GDP.

Expenditure levels usually are much lower in developing countries, where relatively younger populations and smaller pension programs do not yet place large demands on GDP. This generalization masks great diversity, however. In numerous developing countries, public social security systems are endangered because of low payroll-tax collection rates as well as high income-replacement rates that may exceed 100 percent of income at retirement (Goodman and Ferrara, 1988). Endemic economic problems throughout much of Latin America in the 1970's and 1980's resulted in large pension deficits in some countries. Hence, many Latin nations have revamped or are restructuring their pension programs (see page 74). China saw its pension-expenditure share of GDP nearly double from 1.4 percent to 2.7 percent during the period 1978-88. Faced with a rapidly aging population, reform and expansion of pension programs has become an urgently discussed issue in the world's most populous nation.

Figure 4.4
Public Pension Expenditure as a Percent of GDP: Circa 1990



Note: Unweighted averages of national data in each region.

Source: World Bank, 1994

Rising share of GDP devoted to pensions in developed countries

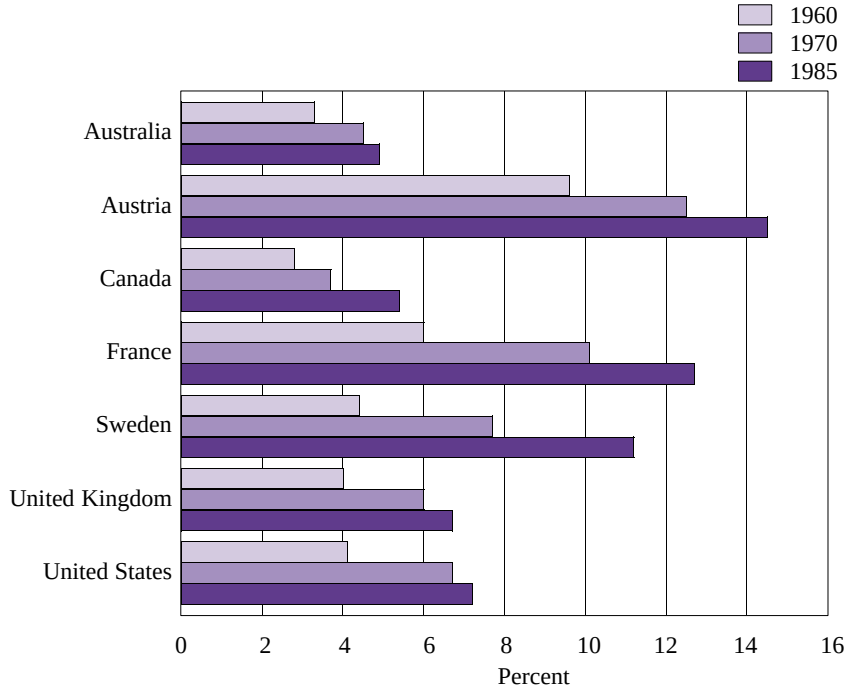
The proportion of gross domestic product spent on public pensions increased in virtually all developed countries during the period 1960-1985. An unweighted average of data for 21 OECD countries showed that public pension expenditures accounted for 8.9 percent of GDP in 1985, compared with 4.3 percent in 1960 (OECD, 1988c). Public pension expenditure has become the largest single item in the public budget in most industrialized countries (ILO, 1995).

Rising pension outlays are a result of 4 major trends in most countries:

- population aging and an increasing number of long-lived pension recipients;
- coverage of population groups once excluded from schemes (such as women and the self-employed);
- legislated increases in the real level of payments per beneficiary; and
- the proliferation of early retirement schemes

During the mid-1970's, several developed countries began to encounter problems with their pension programs as a result of these trends. The financing of pay-as-you-go systems is closely tied to the growth of workers' earnings and general economic growth. During periods of economic downturn, governments may experience balance-sheet problems as a result of lowered revenues and increased public pension liabilities. Resultant deficits have, in the past, been reduced only by increasing the rates of worker contributions and taxes (OECD, 1988b).

Figure 4.5
Public Pension Expenditure as a Percent of GDP: 1960 to 1985



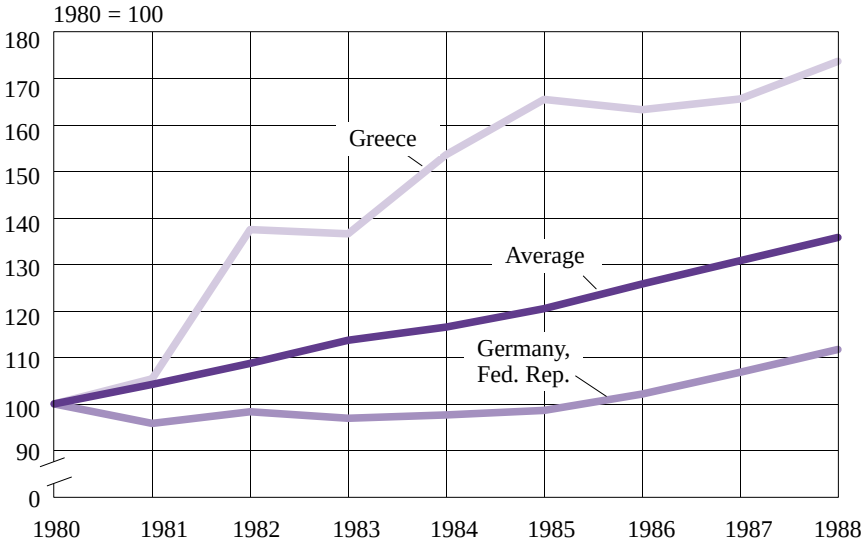
Source: OECD, 1988c

European old-age benefit expenditures jumped more than one-third in the 1980's

Countries of Europe and North America have been models of public pension systems for decades. Over time, there is upward pressure on a national level of pension payment because the average recipient at any given moment has a longer history of contributing to the system. In other words, more recipients qualify more completely for full benefits. This "maturing" of pension schemes tends to exacerbate the trend in rising pension outlays.

A study of 12 European Union nations in the 1980's (Eurostat, 1992) confirmed the longer-term OECD finding (figure 4.5) that old-age benefit expenditure has increased faster than GDP. Aggregate European Union old-age benefit expenditures (at constant 1985 prices) increased 35 percent during the period 1980-88. The greatest increase was seen in Greece while the lowest was recorded in the former Federal Republic of Germany.

Figure 4.6
Trend in Old-Age Benefit Expenditures in the European Union: 1980 to 1988



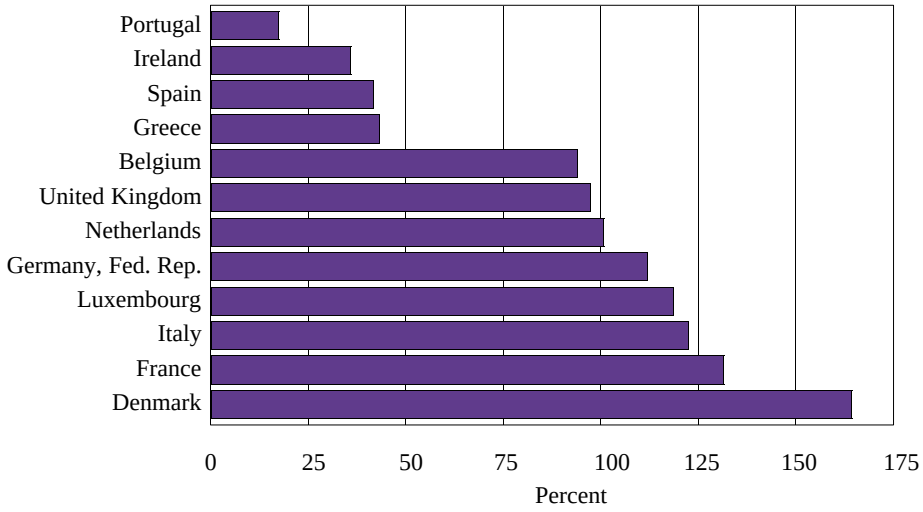
Note: Refers to basic social security plus supplementary compulsory schemes. Based on 1985 prices.

Source: Eurostat, 1992

Per capita old-age benefits relatively high in Denmark

Countries in the European Community spent an average of ECU 1,073 (approximately $US 1,270) per person in the total population on old-age benefits (cash and in kind) in 1988. By multiplying GDP per head by the percentage of GDP spent on old-age social protection, the Statistical Office of the European Union (Eurostat, 1992) has compared each of its 12 member nations to the average. In general, countries with the highest GDP per capita also spend the greatest share of GDP on social protection.

Figure 4.7
National Per Capita Old-Age Benefit Expenditure as a Percent of the European Union Average: 1988



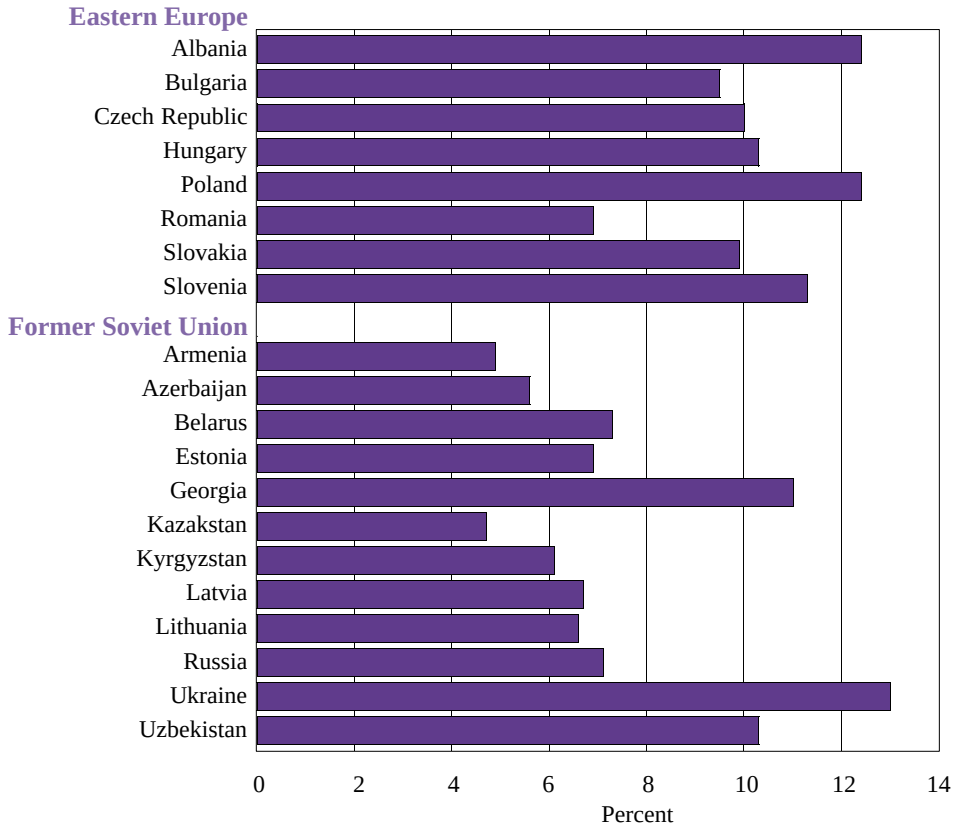
Source: Eurostat, 1992

Steep payroll taxes needed to meet pension obligations in Eastern Europe

As countries of Eastern Europe and the former Soviet Union make the transition from socialist to capitalist economies, economic support of retirees has emerged as a major financial burden. Countries of this region have aging populations; they contain 8 percent of the world's total population but 12 percent of the world's elderly (65 and over) population. To provide the benefits for the elderly set by prior regimes, governments have imposed payroll taxes ranging from 35 to 50 percent (Fox, 1994). This onerous level prompts many workers and employers toward tax evasion and/or the underground economy.

Even though the gross domestic product of many Eastern European nations was falling in the late 1980's and early 1990's, the share of government spending on the elderly was increasing (World Bank, 1994). Pension outlays constitute the largest single expenditure in many Eastern European government budgets, accounting for 10 to 13 percent of GDP in many nations as of the early 1990's. Among the factors contributing to high pension expenditure are relatively high statutory replacement rates—on average, about 80 percent of wages—and early retirement ages—around 57 for men and 53 for women.

Figure 4.8
Public Pension Expenditure as a Percent of GDP in Eastern Europe and the Former Soviet Union: Circa 1990

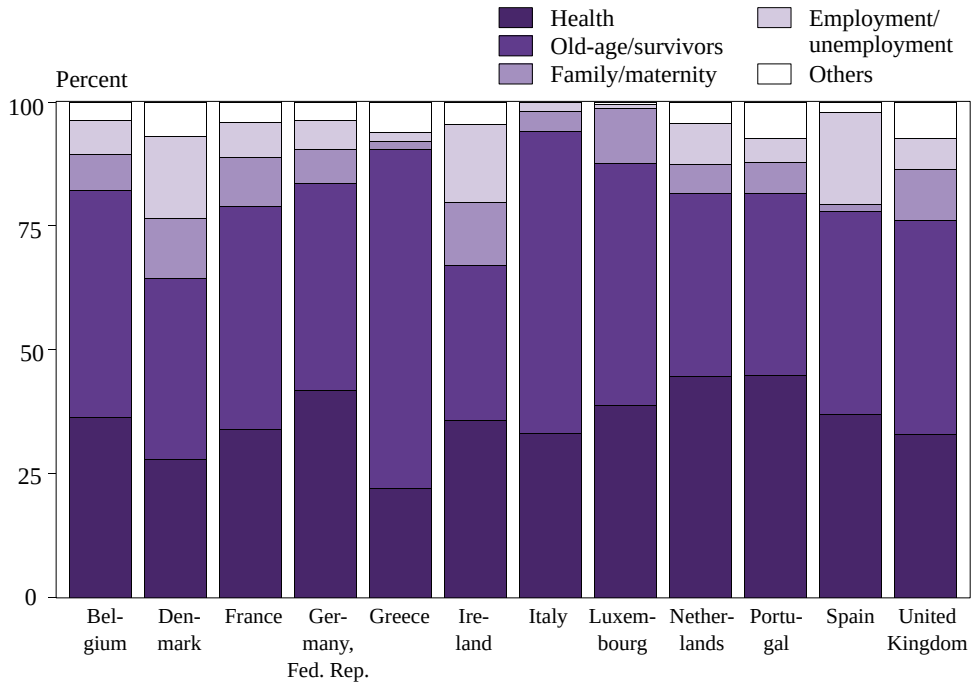


Source: World Bank, 1994

Pension outlays often the main component of social security expenditure

Another gauge of pension expenditure is its relation to total social benefit expenditure. Comparable data for 12 European countries indicate that this proportion ranges from just under one-third in Ireland to more than 60 percent in Greece and Italy. For most countries, these figures understate the actual pension share insofar as pensions for invalidity, disability, and occupational accidents/diseases are included in the "health" component of figure 4.9.

Figure 4.9
Social Protection Benefit Distribution in Nations of the European Union: 1991



Source: Eurostat, 1994

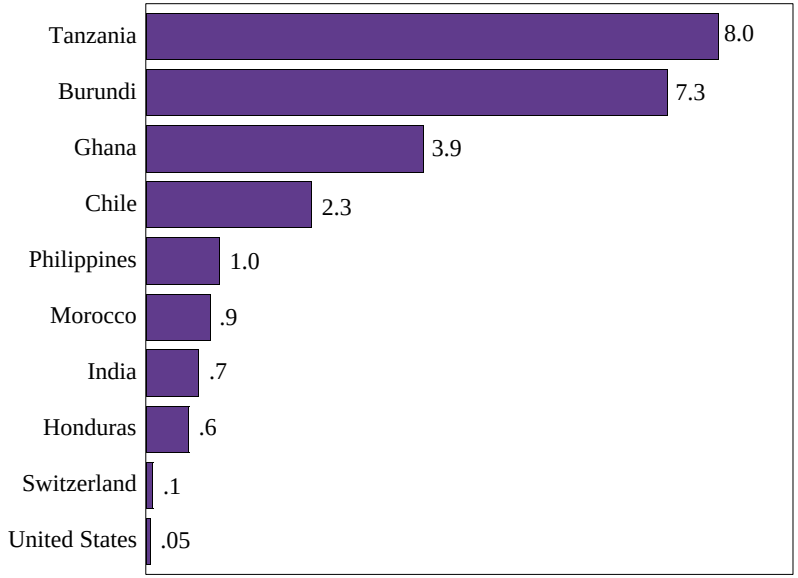
Developing countries often face high administrative costs

The costs of administering a public pension scheme are an important factor in the scheme's overall efficacy. Administrative costs as a percent of total old-age benefits are high in many developing countries (e.g., 10-15 percent in Brazil and Turkey) relative to the developed world. In most OECD countries, administrative costs as a percent of old-age benefits are less than 2 percent. Since the early 1970's, the cost/benefit ratio has been declining in most developed countries (Estrin, 1988), as a result of:

- government austerity programs that helped contain administrative costs;
- increases in total benefit expenditures, reflecting not only the maturation and/or expansion of programs but also the impact of inflation; and
- greater use of computers for the processing of benefits, with corresponding gains in efficiency.

The World Bank (1994) has compiled information on administrative costs per participant in publicly managed pension plans as a percent of per capita income. The data demonstrate that these costs are much higher in lower-income countries, illustrating the importance of educated labor, communications infrastructure, and other advanced technological input to the pension production function.

Figure 4.10
Administrative Costs of Public Pension Schemes: Circa 1990
(Costs per participant as percent of national per capita income)

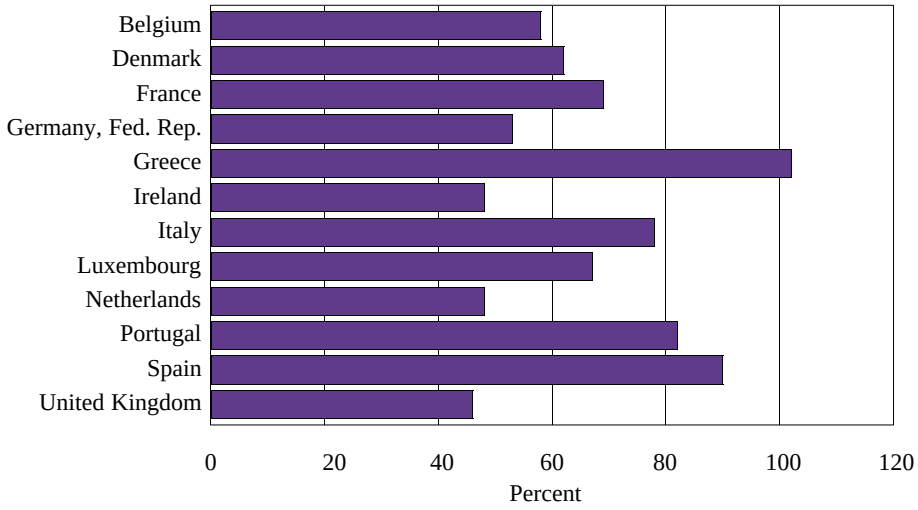


Source: World Bank, 1994

Income replacement rates in developed countries range from 46 to 102 percent

The income replacement rate in old age generally refers to the amount of a retirement pension as a percent of a retiree's last earned income. Income replacement rates vary widely among countries, and may differ within countries according to gender, marital status, length of workforce service, and unemployment experience. A Eurostat comparison of gross income replacement of social security and other compulsory retirement pension programs in 12 European nations (IBIS, 1993) revealed that replacement rates range from 46 percent to 102 percent, based on average annual pay for a manufacturing worker with dependent spouse. In countries with relatively high income replacement ratios (except Italy), pension payments are based on absolute earning levels; most countries with lower replacement levels (e.g., Ireland, the Netherlands and the United Kingdom) have statutory flat-rate amounts that are not tied to the level of earnings on which contributions are paid.

Figure 4.11
Gross Income Replacement Rates of Full Public Pensions: 1990



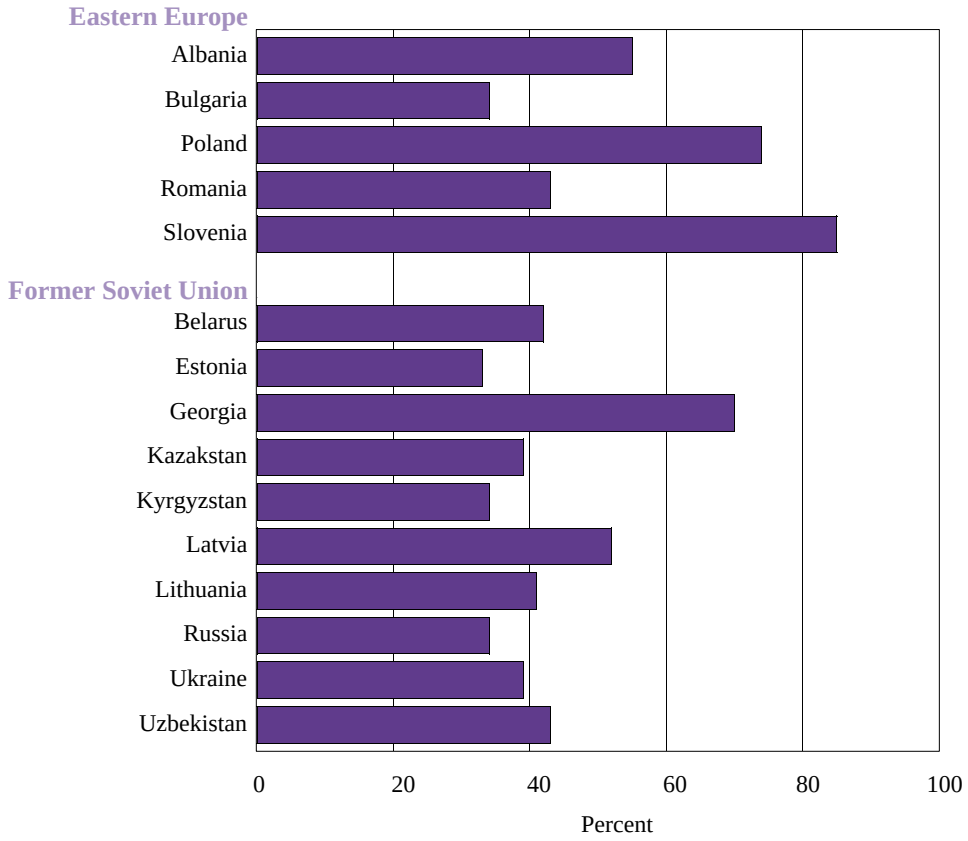
Note: Percent of average gross annual pay for manufacturing worker with dependent spouse.

Source: Eurostat, 1993a; IBIS, 1993

Real replacement rates have declined in Eastern Europe

Pension systems in Central and Eastern Europe face special challenges as countries move away from command economies (Liu, 1993). Prior to economic reforms, open inflation was minimal and pension payments typically were close to the statutory replacement rates which were as high as 80 percent in many nations. More recently, however, inflation has severely eroded pension amounts, and many pensions have declined to the minimum level. In Russia, half of all pensioners receive the minimum amount, while in Romania, average pensions fell from about 65 percent of wages in the 1980's to 40 percent in the early 1990's. Poland and Slovenia have been notably successful in maintaining or raising the pension/wage ratio since 1989 (Fox, 1994).

Figure 4.12
Average Pension as a Percent of Average Wage in Eastern Europe and the Former Soviet Union: 1992



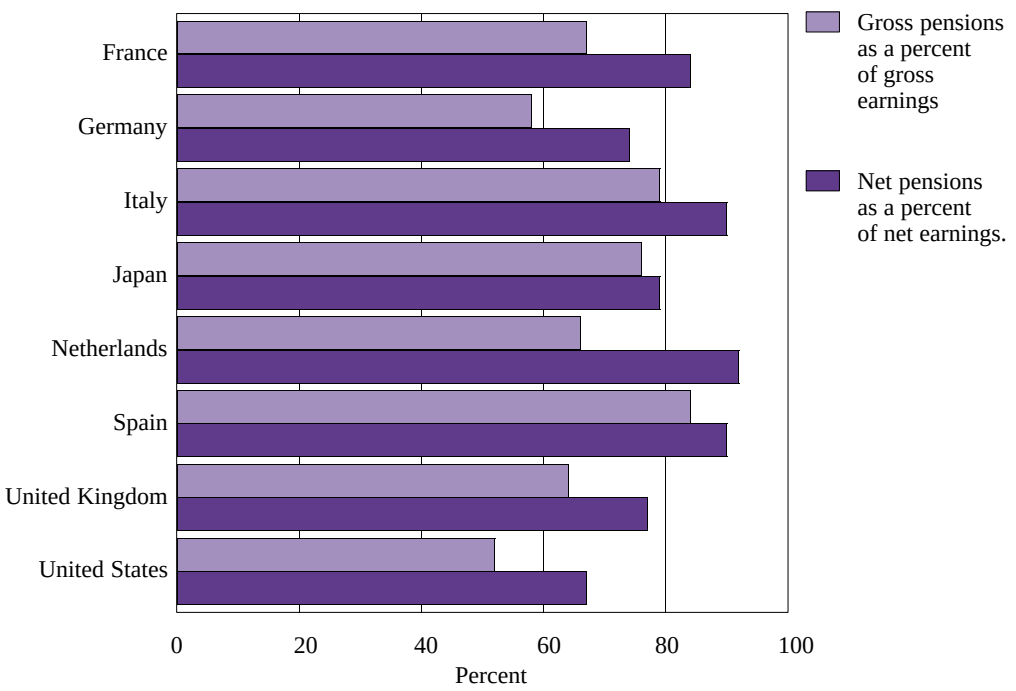
Source: Fox, 1994

Net income replacement higher than gross income replacement

Comparisons among national replacement rates usually are made in terms of gross retirement income and gross earned income. When data are available, a more useful comparison considers net income replacement, that is, income replacement after taxes. Net income replacement usually will be higher than gross income replacement because taxes on retirement income often are proportionally lower than on earned income, and because pensioners in some countries are given other preferential tax treatment (Eurostat, 1991).

An eight-country study (Noble Lowndes & Partners Limited, 1992) compared retirees receiving one and one-half times the national average of pension earnings (public and private combined). In each country, the retirees' situation looked better when net income was considered. In Italy, the Netherlands and Spain, the net replacement level was 90 percent or more of pre-retirement net earnings. The net rate in the United States, 67 percent, was the lowest of the eight nations.

Figure 4.13
Gross Versus Net Income Replacement Rates: 1992
(Total pension income)



Note: Data are for retirees who receive 1.5 times the national average of pension income from all sources (public and private).

Source: Noble Lowndes & Partners, Ltd., 1992

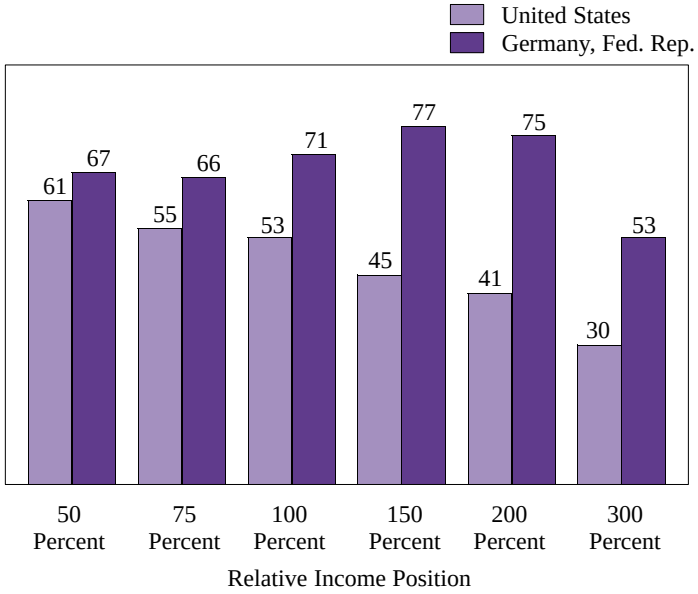
Income replacement levels may have a philosophical basis

Crossnational differences in income replacement rates arise in part from differences in philosophy regarding the aim of social security. Both Germany and the United States have pay-as-you-go public pension systems that provide coverage for a broad segment of the labor force. In the United States, the primary goal of the Social Security system is to prevent poverty among the elderly by providing a minimum standard of living. In Germany, public pensions are designed to provide a greater correlation between lifetime earnings and retirement income. As a result, German public pensions provide for higher net replacement (about one-third higher on average) than do U.S. pensions, especially for persons with higher income levels (Borsch-Supan, 1994).

Other important crossnational differences in retirement are exemplified in a Germany-U.S. comparison. Roughly one-fourth of German workers are subject to mandatory retirement, usually at age 65; in the United States mandatory retirement is considered to be "age discrimination" and is illegal. The incentive to retire early is more powerful in Germany than in the United States, not only because of more attractive income replacement rates but because of lower benefit reductions for early exit. And, occupational (private) pension plans are much more prevalent in the United States, where about half of Americans aged 60 and over receive occupational-plan benefits, sometimes in addition to public benefits. The corresponding figure for West Germany in the late 1980's was 16 percent, and private pension income typically is in the form of life insurance annuities.

Figure 4.14

Net Income Replacement Ratios of Public Pensions in the United States and the Federal Republic of Germany, by Income Level: Late 1980's



Note: Relative income position refers to percentage of an average manufacturing worker's wages. Data in figure 4.14 refer to the percent of wages replaced by public pensions, based on after-tax incomes of workers with 40 years of service.

Source: Borsch-Supan, 1994